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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MING C. HAO, UMESHWAR DAYAL, MEICHUN HSU,
DANIEL A. KEIM, ADRIAN KRUG, and JULIAN LADISCH

Appeal 2009-009028
Application 09/982,481
Technology Center 2600

Before ROBERT E. NAPPI, KENNETH W. HAIRSTON, and JOHN C.
MARTIN, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. §§ 6(b) and 134(a) from the final rejection of claims 44 to 48, 50, 53, 54, 56, 59, 60, and 63 to 90. We will reverse.

The disclosed invention relates to the formation of pixel bar charts by partitioning pixels into groups and sub-groups (Figs. 2, 3c, 4; Spec. 9-19; Abstract).

Claim 44 is representative of the claims on appeal, and it reads as follows:

44. A method executed by a computer to form a pixel bar chart for display on a display monitor, comprising:

obtaining a set of records, each record comprising a plurality of attributes;

assigning a pixel to each of said records to provide record-assigned pixels, wherein every such record-assigned pixel in the chart is assigned to a different record; and

constructing the pixel bar chart by:

partitioning the record-assigned pixels into groups along a first axis of the pixel bar chart according to a first dividing attribute;

partitioning the record-assigned pixels in the groups into sub-groups along a second axis of the pixel bar chart according to a second dividing attribute;

after partitioning into the sub-groups, sorting, in each of the sub-groups, the record-assigned pixels according to a first ordering attribute along the first axis of the pixel bar chart, and according to a second ordering attribute along the second axis of the pixel bar chart, wherein each record-assigned pixel is adjacent at least one other record-assigned pixel.

The prior art¹ relied upon by the Examiner in rejecting the claims on appeal is:

Hao US 7,221,474 B2 May 22, 2007
Keim et al., *Pixel Bar Charts: A New Technique for Visualizing Large Multi-Attribute Data Sets without Aggregation*, HP Technical Report, Apr. 11, 2001, pp. 1-10.

Ankerst et al., *Towards an Effective Cooperation of the User and the Computer for Classification*, International Conf. on Knowledge Discovery & Data Mining (KDD-'2000), Aug. 20-23, 2000, pp. 1-10.

Hao et al., *Visual Mining of E-Customer Behavior Using Pixel Bar Charts*, HP Technical Report, June 20, 2001, pp. 1-7.

The Examiner rejected claims 44 to 48, 50, 53, 54, 56, 59, 60, and 63 to 90 under 35 U.S.C. § 102(e) based upon the teachings of the patent to Hao.

The Examiner rejected claims 44 to 48, 50, 53, 54, 56, 59, 60, and 63 to 90 under 35 U.S.C. § 102(a) based upon the teachings of Keim.

The Examiner rejected claims 44 to 48, 50, 53, 54, 56, 59, 60, and 63 to 90 under 35 U.S.C. § 102(b) based upon the teachings of Ankerst.

The Examiner rejected claims 44 to 48, 50, 53, 54, 56, 59, 60, and 63 to 82 under 35 U.S.C. § 102(a) based upon the teachings of the publication to Hao.

Turning first to the anticipation rejections based upon the Hao patent, the Ankerst publication, and the Hao publication, Appellants contend *inter alia* that: the Hao patent lacks sorting after partitioning into sub-groups

¹ The filing date of the patent to Hao is prior to the filing date of the subject application.

(Second App. Br. 8, 9); the Ankerst publication lacks any of the claimed subject matter directed to assigning pixels to records for a pixel bar chart, partitioning the record-assigned pixels into groups and sub-groups according to first and second dividing attributes, and sorting the record-assigned pixels in each sub-group according to first and second ordering attributes along first and second axes (Second App. Br. 16-21); and the Hao publication lacks the claimed partitioning and sorting of record-assigned pixels (Second App. Br. 21-23).

We agree with Appellants' arguments. Although the Hao patent indicates (col. 7, ll. 29-32), in connection with Figure 6b, that "after the plurality of records are sorted by the first attribute and divided into groups, the records within each group are sorted vertically by the second attribute," the Hao patent is silent as to sorting record-assigned pixels in sub-groups, as set forth in the claims on appeal. The data mining, classification, and decision tree teachings of the Ankerst publication do not have any relevance to the claimed formation of pixel bar charts. The publication by Hao describes the use of pixel bar charts for visual data mining (p. 4, last paragraph), but is completely silent as to pixel bar chart formation via the claimed technique. Accordingly, the anticipation rejections based upon the teachings of either the Hao patent, the Ankerst publication, and the Hao publication are reversed.

Turning lastly to the anticipation rejection based upon the teachings of Keim, Appellants submitted a Rule 132 declaration (filed March 20, 2007) from all of the inventors of the subject application² indicating that although

² HP is the real party in interest (Second App. Br. 1).

Adrian Krug is not listed as an author of the Keim HP publication: “the entire content of the Keim HP Technical report originated with or was obtained from” all of the inventors of the subject application including Adrian Krug; “the authors of the Keim HP Technical Report derived their knowledge of the subject matter described in the Keim HP technical report from” all of the inventors of the subject application including Adrian Krug; and “the Keim HP technical report describes the work of” all of the inventors of the subject application including Adrian Krug. According to the Examiner, the statements in the declaration “do not provide any factual evidence of Adrian Krug’s inventorship of the claimed subject matter” (Ans. 37) and “Appellant has not met the burden of proving facts sufficient to overcome the *prima facie* available reference” by Keim (Ans. 38).

We disagree with the Examiner. In view of the sworn statements by the authors (i.e., Hao, Dayal, Hsu, Keim, and Ladisch) of the Keim publication that Krug is also an author of the Keim publication, the Oath executed by all of the noted individuals as inventors of the subject application, and the uncontested match between the claimed subject matter and the subject matter described in the Keim publication, we find that the statements in the declaration do provide factual evidence that the inventive entity of the subject matter disclosed in the Keim publication matches the inventive entity of the subject application. Thus, the anticipation rejection based upon the teachings of the Keim publication is reversed because the publication is not available as a prior art reference against the claimed subject matter.

The decision of the Examiner is reversed.

Appeal 2009-009028
Application 09/982,481

REVERSED

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